

AUTHORS OF PLANT GENERA AND THE INTERNATIONAL PLANT INDEX

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An impressive volume printed with the aid of computers and assembling in one place a lot of information heretofore somewhat scattered has recently appeared.¹ However, most botanists will not find the information to be of great intrinsic value and an occasional consultation of the work will probably suffice for their purposes.

The bulk of this paperbound book is devoted to an alphabetical listing of the "authors" accompanied by four columns under the headings, AUTHOR CODE, BORN, COUNTRY, and DIED. This is followed in double-column format by 62 pages of "author" listings, giving the author code in each instance. The final section gives a three-column listing of name abbreviation, author name and author code in a double-column format, followed by an addenda to each of the three lists.

If botanists did indeed take up and use the author code-order index for citation of author names of plants, as urged by Mr. Gould, it would be a radical departure from past practice. It would also involve giving up to the machine the essences of familiarity which link plant names with the men who gave them to the plants. We now have no difficulty in remembering that *Schlecht.* stands for *Schlechtendal* or *Schott* for Schott but how many botanists will remember that SCH794 is Schlechtendal and SCO794 is Schott? How can one be expected to remember that SHO904 is A. J. Sharp and SHA904 is W. M. Sharp? These unnecessary abbreviations reflect the choice by the authors of an inadequate system to handle the information they are trying to present.

¹Authors of Plant Genera, by Sydney W. Gould and Dorothy C. Noyce. International Plant Index 2: 1-336. 1965. The New York Botanical Garden, New York; The Connecticut Agricultural Experiment Station, Box 1106 (IPIx) New Haven, Connecticut 06504; \$6.00 in U.S.A. and Canada, \$6.50 in other countries.

It can be argued that having the names of the men of historical botany closely associated with the names of the plants they helped reveal to the public is of no great moment. However, it is not as simple as that. The name of the author, if it is known and recalled, helps put the name of the plant into its historical setting, which in turn helps with the geography and other matters concerning the plant itself. The richness of the presently used name content, with citations that are well understood and appreciated, will be greatly denuded by the device offered in the book under review. In addition, one will be forced to look up, on every occasion, the correct author code. This will be a nuisance for taxonomists; for non-taxonomists, it will make author citations both incomprehensible and ridiculous. Are citations such as *Rhododendron canadense* (LIN707)BSP859 or *Buchloë dactyloides* (NUT786)ENG809 to the advantage of either taxonomy or plant sciences generally?

RELATION OF STATED CONTENT TO ACTUAL CONTENT: The book is entitled "Authors of Plant Genera." In the introduction, it is stated that, "the work encompasses the authors who have named the genera of the entire plant kingdom." Since great stress is laid on accuracy by the authors, for example, p. 9, Mr. Gould states, "the work of IPIx is probably already 95% accurate in each division" and the advertising flyer starts off with, "Computer Accuracy for Your Reference Library", one naturally expects the book to be accurate. However, a quick glance reveals that scores of names of botanists and others are included, who not only did not name any genus of plants but no other taxon of a category higher than genus as well. In fact, when the list is analyzed a little further, one finds the names of many persons who have not named any plant taxon whatever. Many are not botanists at all. One finds librarians, zoologists, friends of the authors and the authors themselves, none of whom named genera. Is this the kind of capriciousness that should characterize an accurate scholarly work? Do the authors think they are playing games with the ma-

terials of science? What then are the criteria for the inclusion of a name in the "Authors of Plant Genera"?

ACCURACY AND COMPLETENESS: One reliable and readily available source that should have been a major check-point for "Authors of Plant Genera" is Index Nominum Genericorum, published by the International Association for Plant Taxonomy. Apparently this recent authentic work, now only partially published but having over 21,000 cards in it, was hardly utilized at all. This circumstance permits us to use it as a check for the accuracy of the book under review.

The alphabet from Aa to Af, amounting to approximately 400 cards of Index Nominum Genericorum, was checked against "Authors of Plant Genera" by a colleague. This number turned up six errors or omissions, of which five were complete omissions of botanists who had described genera of plants. If this rate of omission holds when checked against the rest of the Index Nominum Genericorum presently available, it means that over 250 omissions of authors who named plant genera were carelessly left out of the book being billed as "the most complete work of its kind." If Index Nominum Genericorum were complete, one wonders how many thousands of names that legitimately should have been included in "Authors of Plant Genera" would be shown up by a check against it.

Checking for accuracy is a time consuming and uninspiring enterprise and one tends to turn to the quickest way of seeing whether the data given in a book stands up or not. We noticed that Leslie Andrew Garay and Clarence Garay are the same in the author code, page 86, and that he is alleged to be from Canada. Leslie Garay, who works nearby, tells me that he has never published under the name of Clarence Garay and has not been known under that name. Furthermore, he has been in the United States since 1957, and was born in Hungary. Although he did spend some years in Canada, the information on Garay is both inaccurate and misleading.

We know that Thomas Coulter was born, lived and died in Ireland, but on page 69 he is listed as England. On the

other hand, N. L. Bor is given as Ireland, although he specialized on the grasses of southeast Asia, spent much time there, and for many years he has been at Kew in England, where he has been professionally identified right down to the present. Oddly enough, although Edward Perceval Wright was born, worked and died in Ireland, apparently on the basis of a visit to the Seychelles Islands for six months in 1867, "Seychell. has become his "country of principal work or home." In short, every entry under this column must be checked by the user to determine its meaning and accuracy, if these are important to him.

Under the column "Country" the strangest designations appear. For example, S. America is given as a country many times, but so also are Argentina, Brazil, Colombia, etc., the true countries of South America. It must seem strange to the well known Argentinian botanists, Professors Arturo Burkart and Lorenzo R. Parodi, to read that their country is "S. America." I am surprised to see listed as countries: Patagonia, Sahara, Transvaal, South West Africa, etc. Certainly these subversions cannot be read as a sign of erudition on the part of the authors. One is led to ask, how can such sloppiness be supported as a crusade ostensibly to help librarians, taxonomists and plant scientists?

THE INTERNATIONAL PLANT INDEX: The two volumes so far published by IPIx, as poorly prepared as they are, can scarcely be said to have done any real harm. This is so because the content of each of them is readily found elsewhere in reliable sources and the real scholar will soon discover that the volumes are not worth bothering with, in spite of the exorbitant claims to the contrary. However, I am alarmed by the forecast that the third volume will be "Genera of the Plant Kingdom." If such a work is published with the same lack of understanding of botanical nomenclature and taxonomy, and the same disregard for the International Code of Botanical Nomenclature that is evident in the published work so far done by the people at International Plant Index, it will be a disaster much worse than

the appearance of the infamous volumes of Otto Kuntze² in the 1890's.

We have no quarrel with the use of computers or other data-processing machines to help organize and produce an index of plant names. Properly handled, such a single complete index would not only be extremely useful in itself but it could be the basis for encoding a wide range of botanical information that could then be made readily available. We part company with the organizers of IPIx when they insist on going beyond a simple index, yet use only books (and secondary sources, at that) as the basis for value judgements concerning the taxonomy of the plants whose names they are handling. In *Family Names of the Plant Kingdom*,³ it is a simple fact that a value judgement was made every time a name was selected for use as an operative name. A taxonomic judgement was made every time a name was listed as a synonym. These are facts even though the authors specifically state that the contrary is the case.

The hundreds of value judgements made by the author of "Family Names" were completely unsupported and evidently were made without any real knowledge of the plants involved or of any reasons why one course of action should be taken in preference to another. The use of the word "operative" or some other designation such as "correct" or "in use" does not lessen the responsibility for making an acceptable choice. To be acceptable the name chosen has to stand up to the requirements of the science. It is not the business of an indexer to make choices where taxonomic judgements are involved, unless he can produce the scientific evidence to back up the choice. Quite obviously, *Family Names of the Plant Kingdom* is not an unbiased index and it cannot, therefore, be reliably used as an index. As a

²*Revisio Generum Plantarum*. Pars I-III plus supplement. 1891-1898.

³*Family Names of the Plant Kingdom*, by Sydney W. Gould. *International Plant Index* 1: 1-111. 1962. For a review see *Botanical Nomenclature, Punched Cards, and Machines*, by C. E. Wood, Jr., R. S. Cowan and G. Buchheim. *Taxon* 12: 2-12. 1963.

reliable source of the proper name of a family, it is completely hopeless.

In his writing, Mr. Gould has lectured to taxonomists, quoting his favorite authors and giving naive analogies to telephone communication and space science. Unfortunately he has kept himself immune from even an elementary understanding of the basic ideas and tenets of taxonomy and nomenclature, the subjects in which he is apparently trying to attain an authoritative position.

The real danger that lies ahead arises from the fact that those most deeply committed to IPIx are untrained for the task they are trying to perform and will not listen to anyone knowledgeable enough to help them. Their supporters and advisers are equally lacking in an understanding of the problems involved. If the International Plant Index continues in the path so far laid down, taxonomists and botanists generally will be saddled with a nomenclatural mess, a heritage largely from those who have willfully or unwittingly given their support to IPIx.

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